

FE-259WD

Diagram No. 1222-4

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey ... Wire Drag
Field No. ... R/H-10-3-84
Office No. ... FE-259WD

LOCALITY

State ... Virginia
General Locality ... Chesapeake Bay
Locality ... 6 Miles East of Wolf Trap

1984

CHIEF OF PARTY
LCDR D.D. Winter

LIBRARY & ARCHIVES

DATE ... October 3, 1984

☆U.S. GOV. PRINTING OFFICE: 1980-766-230

Area 2

CATS:

40-12226

80-12225

12220

80-12221

to sign off see
Record of Application

HYDROGRAPHIC TITLE SHEET

FE-259 WD

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form,
filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

R/H 10-03-84

State VIRGINIAGeneral locality CHESAPEAKE BAYLocality 6 MILES EAST OF WOLF TRAP
AWOIS ITEM # 3184Scale 1:10,000Date of survey 26 Apr (JD117) ^{AND} 22 May (143), 1984Instructions dated Dec. 22, 1983Project No. OPR-E609-RU/HE-84Vessel NOAA SHIPS RUDE & HECK, LAUNCHES (1290) & (1291)Chief of party LCDR Donald D. WinterSurveyed by D.D. Winter, N.G. Millett, E.M. CLARK, J.H. MADDOX AND T.G. CALLAHANSoundings taken by echo sounder, hand lead, pole DE-719B S/N 5497, and DE-719C S/N 10278Graphic record scaled by NGM, TGCGraphic record checked by TGC, MGKProtracted by N/AAutomated plot by XYNETICS 1201 PLOTTER
(AMC)Verification by C.D. MEADORSoundings in fathoms feet at MLW MLLWPredicted TidesREMARKS: All times are recorded in UTC.NOTES IN RED WERE MADE DURING OFFICE PROCESSING.STANDARDS CK'D 10-9-84C.loysurfs checked 3/14/84 SJV
SURF checked 3/14/84 SJV

TABLE OF CONTENTS

HYDROGRAPHIC TITLE SHEET	i
PROGRESS SKETCH	ii
SMOOTH SHEETS.....	iii
TABLE OF CONTENTS	iv
A. PROJECT AUTHORITY	1
B. CHARACTERISTICS AND LIMITS OF SURVEY	1
C. SURVEY VESSELS	1
D. HYDROGRAPHIC SHEETS	1
E. EQUIPMENT AND TECHNIQUES	2
F. CONTROL STATIONS	2
G. CALIBRATION AND POSITION CONTROL	3
H. DATES OF SURVEY	3
I. REDUCTION AND PROCESSING OF DATA	3
J. JUNCTIONS AND SPLITS	4
K. COMPARISON WITH PRIOR SURVEY	4
L. COMPARISON WITH THE CHART	4
M. ADEQUACY OF SURVEY	5
N. INCOMPLETE ITEMS	5
O. CURRENTS AND WINDS	5
P. PERSONNEL	5
Q. GENERAL NOTES	5
R. APPROVAL SHEET	7
APPENDICES	
*A. ABSTRACT OF ELECTRONIC CORRECTORS	A- 1
*B. ABSTRACT OF DAILY STATISTICS	A-13
C. HORIZONTAL CONTROL	A-15
D. SIGNAL LIST	A-16
*E. PNEUMO DEPTH GAUGE REPORT	A-19
F. DIVING REPORT	A-20
*G. SHEET PARAMETERS	A-21
H. LOCAL NOTICE TO MARINERS REPORT	A-24
*I. SMOOTH TIDE REQUEST - FIELD TIDE NOTE	A-26
J. DANGERS TO NAVIGATION REPORT	A-30
*K. TRANSMITTAL LETTERS	A-31
*L. SIDE SCAN SONAR COVERAGE ABSTRACT - TARGET ABSTRACT - TARGET LIST	A-37
*M. SETTLEMENT AND SQUAT DATA	A-38
*N. GEOGRAPHIC NAMES LIST (FIELD)	A-39

* FILED WITH THE ORIGINAL SURVEY DATA ,

WIRE DRAG
HYDROGRAPHIC SURVEY FE-259WD, R/H 10-03-84
1:10,000 SCALE, 1984, AWCIS # 3184
NOAA SHIPS RUDE & HECK
LCDR DONALD D. WINTER, COMDG.

A. Project Authority

This project was conducted in accordance with Hydrographic Project Instructions OPR-E609-RU/HE-84, dated 22 December 1983. There are no changes or additions to these original instructions. The purpose of this project is to verify or disprove certain charted submerged wrecks and obstructions in the southern part of Chesapeake Bay. Detached positions, least depths, or wire-drag clearances were to be obtained for these submerged wrecks and obstructions.

B. Characteristics and Limits of Area Surveyed

This report covers the area bounded by the 100 meter search radius about the charted position of AWCIS Item #3184, latitude 37° 24' 12.00"N, longitude 076° 03' 42.00"W. This item consists of the ruins of the Navy Wolf Trap Desaussins Platform.

C. Survey Vessels

The NOAA Ships RUDE, Vesno 9040, and HECK, Vesno 9140, were the only vessels assigned to this survey. Launches 1290 and 1291 were used to obtain the detached positions, pipe drag, and launch drag work during this survey.

D. Hydrographic Sheets

The hydrographic sheets used in this survey were made of mylar and were constructed with the Digital PDP 11/34 computer, S/N AG22645, and Houston Instruments roll-bed plotter, S/N 8731-8, aboard the Ship RUDE. The project instructions required that all data be smooth plotted at a scale of 1:20,000 but a scale of 1:10,000 was used for all field plotting and final data analysis for clarity. A SCALE OF 1:10,000 WAS ALSO USED FOR OFFICE PROCESSING.

The field sheet was plotted at a scale of 1:10,000 and was used to hand plot the launches position while on line. A smooth sheet was also plotted aboard the RUDE using the same equipment as described above. This smooth sheet was used to plot the hand strip, the detached position of the hand, the limits of the foul area, and the detached position of the Wolf Trap Desaussins Lighted Bell Buoy "WT2". An overlay was used to plot the clearing strip which achieved the least effective clearance depth. The clearing strip in the opposite direction was not smooth plotted but is contained in the survey records. The field records are being sent to the Atlantic Marine Center for final

verification and smooth Plottings. ✓

E. Equipment and Techniques

The initial survey operations on JD 117 consisted of an initial echo sounder search within the 100 meter search area of the reported position of AWOIS Item #3184 at 37° 24' 12"N, 076° 03' 42"W. A Raytheon Model DE-719 B fathometer, S/N 5497, was used during this search. The extent of the obstruction was determined during this operation with an approximate least raw depth of 8.5 feet, as determined by the fathometer and corrected only for vessel draft. ~~THE VESSEL DRAFT WAS 2.6 FT. NO POSITION FOR THE DEPTH WAS GIVEN BY THE FIELD.~~

A pipe drag was then conducted in the vicinity of the least depth determined by fathometer. A marker buoy was deployed at this position to facilitate the pipe drag operation. Circle sweeps with the pipe drag set at 7 feet were conducted about this marker buoy. A hang was encountered at position 37° 24' 13.34"N, 076° 03' 39.23"W, fix 02, least depth of 7.1 feet at MLLW. ~~corrected for predicted tides. DEPTH WAS NOT CORRECTED FOR THE VELOCITY OF SOUND IN WATER.~~

Launch drag operations were then conducted on this item on May 22, 1984, JD 143, to completely resolve this item, since there was some doubt as to the overlap of pipe drag strips because the pipe was severely bent during a hang. A hang was encountered during strip 2, fix 25, at 37° 24' 13.65"N, 076° 03' 38.99"W, at an effective depth of 5.3 feet at MLLW. ~~corrected for predicted tides.~~ This area was then cleared in two directions at an effective depth of 4.0 feet at MLLW, during strip 1, and 3.3 feet at MLLW, during strip 3.

Field smooth plotting of drag strips was limited to the hang strip and the south-north clearing strip of 3.3 feet effective depth, representing the least effective clearance depth. ~~Echo sounders were annotated and run concurrently on both launches with all launch drag operations on JD 143. A Raytheon Model DE-719 B, S/N 5497, was used on Launch 1291, and a Model DE-719 C, S/N 10278, was used on Launch 1290.~~ ALL STRIPS WERE SMOOTH PLOTTED DURING OFFICE PROCESSING.

F. Control Stations

Two electronic control stations were used for this survey. These stations were:

Station Name	Position	Elev.
YORK SPIT LIGHTHOUSE (1900) ✓	37° 12' 34.452"N ✓ 076° 15' 16.369"W	11.28m
WOLF TRAP LIGHTHOUSE (1898) ✓	37° 23' 24.618"N ✓ 076° 11' 23.295"W	15.85m

These stations were located by NGS and the adjusted positions for these stations were obtained from published NGS horizontal control data. All stations are of Third-Order, Class I control accuracy or better. The station positions are based upon the North American Datum of 1927.

G. Calibration and Position Control

Vessel positioning for all work was accomplished with the Del Norte 520 series electronic positioning equipment operated at a frequency of 9400 MHz in the range-range mode. A listing of the DMU and master units used by the vessels during this survey is listed by Julian Ray in Appendix A. Remote unit 72, S/N 2897, was installed at YORK SPIT LIGHTHOUSE. The remote installed at WOLF TRAP LIGHTHOUSE was unit 78, S/N 2986.

Two baseline calibrations were performed during this survey. The baseline calibrations were conducted in the immediate work area and entirely over water in accordance with AMC OPCODE 79. Baseline calibration distances were determined by the HP 3800A electronic distance measuring instrument, serial number 0987A00157. The baseline used for the calibration ran from the Little Creek Coast Guard, western most pier, to the Little Creek East Jetty Light "1". The distance of this baseline, as measured by the HP 3800A, was 2183.14m.

The opening baseline calibration was conducted on 16 Aprilx 1984 (JD 107) and the closing baseline calibration will be conducted on 5 Junex 1984 (JD 157). The closing calibration data will be provided at a later date.

The opening and closing daily calibration checks for this survey were accomplished using the three point sextant fix calibration method in accordance with the Hydrographic Manual Section 4.4.3.3. The daily correctors for all calibrations were stable and within accuracy tolerances for a survey of this scale. Therefore, only baseline calibration data should be applied to the raw position data during final processing and smooth plotting. See Appendix A for daily calibration data and Appendix D for a complete listing of stations used. *THE DAILY CORRECTORS WERE USED FOR OFFICE PROCESSING.*

H. Dates of Survey

This survey was begun on 26 Aprilx 1984 (JD 117) and completed on 22 May x 1984 (JD 143).

I. Reduction and Processing of Data

Data collected during launch drag operations was manually entered in the wire drag volumes while on line. The position data was then entered in the Digital PDP 11/34 computer off line. The programs used were the R/H Double Precision Wire Drag programs. The drag strips were then smooth plotted with the Houston Instruments roll-bed plotter. Effective depths from reduced data were then drawn on the drag strips in colored pencil. Only the hang strip and the clearing strip which achieved the least effective clearance depth were plotted.

Test data was applied to the drags in a manner which differs slightly from the Wire-Drag Manual. This method has been used for the last several years aboard the drag ships and is a more conservative method. When an upright was lowered, the deeper drag depth was not claimed until the time of the first

test at that depth. When an upright was raised, the drag depth from the first test after the raising of the upright was applied to the time when the upright was raised. (If the amount of lift increased during a drag when uprights remained unchanged, this decreased drag depth was applied back to a time halfway between the time of the earlier test, with less lift, and the time of the later test with the greater lift.) ^{IN OFFICE PROCESSING, THE LIFT CHANGE WAS APPLIED TO THE POSITION PRECEDING THE LIFT CHANGE.}

Predicted tide correctors were then applied to the drag depths obtained. These predicted tide correctors were generated onboard with the ship's Digital PDP 11/34 computer and predicted tide tapes for 1984. These tide tapes were supplied to the ships by MOA 231. Hardcopy printouts of the predicted tide correctors used during this survey are included in the data file. See Appendix I for tide correctors.

The changes in effective depth that occurred during a drag were applied at the exact time of change. Fix interval for the launch drag work was two minutes, therefore some changes in effective depth occurred on the minute between fixes. When this occurred the time was interpolated and drawn in appropriately.

All detached positions were computed using the Geodetic Packase - 800610 Program and the HP 9815A computer, S/N 1825A02388.

J. Junctions and Splits

This survey consists of an AWOIS item investigation with no junction requirements.

K. Comparison with Prior Surveys

The survey area is contained within the limits of prior survey H-8448 (1958). This item was positioned on the prior survey ^{In Lat. 83°24'12" Long. 76°03'33.5"} with the notation "stack on platform". Depths in the vicinity of this desaussins platform ranged from 33 to 41 feet on the prior survey. In addition, two buoys were positioned in the vicinity of this platform on the prior survey. See Section L of this report for charting recommendations and the complete findings of this survey. ^{THE "PLATFORM AND STACK" ON THE PRIOR SURVEY IS SUPERSEDED BY THIS FIELD EXAMINATION FE-259 WOC (1984).}

L. Comparison With the Chart

The largest scale chart which contains the survey area is NOS Chart 12226, scale 1:40,000. The current edition of this chart at the time of survey operations was the 10th Ed., Mar. 27/82 and was used for all chart comparisons. ^{THE SOURCE OF THE PRESENTLY CHARTED INFO. IS LNM 42/80.}

The ruins of the former Wolf Trap Desaussins Range were located over a rectangular area approximately 120m by 60m, centered approximately 0.05 NM east of Wolf Trap Desaussins Lighted Bell Buoy "WT2". This buoy was found to be on station and adequately marks this obstruction.

Charting Recommendations

Chart a foul area within the following limits: DO NOT CONCUR

NW Corner 37° 24' 14.^{3 98}~~21~~"N, 076° 03' 40.⁴⁸~~52~~"W
 NE Corner 37° 24' 14.⁰⁶~~28~~"N, 076° 03' 38.⁵~~6~~"W
 SW Corner 37° 24' 10.¹¹~~34~~"N, 076° 03' 40.²⁷~~31~~"W
 SE Corner 37° 24' 10.⁰⁹~~10~~⁸⁷"N, 076° 03' 38.⁰~~6~~"W

This area consists of a very irregular bottom with depths ranging from 15 to 20 feet with the surrounding area depths generally around 40 feet.

Chart an obstruction within this foul area at 37° 24' 13.¹¹~~55~~"N, 076° 03' 38.⁷⁹~~79~~"W, with a wire drag cleared depth of 3.5 feet at MLLW. ~~corrected for predicted tides.~~ Remove the "Subm obstr (3 ft rep 1980)" legend from the chart. Retain the Wolf Trap Desaussins Lighted Bell Buoy, R "WT2" Qk F1 BELL, as charted at 37° 24' 11.96"N, 076° 03' 43.64"W. *SEE THE CHARTING RECOMMENDATION BELOW.

All presently charted landmarks in the proximity of this survey were visually verified from offshore and are adequate as charted. No additional landmarks or aids to navigation were noted in the area as suitable for charting.
 *RETAIN THE SYMBOL AND NOTE "Subm obstr" AS CHARTED. DELETE THE NOTE (3 ft rep 1980) AND ADD THE NOTE (Cleared 3 ft).

M. Adequacy of Survey

AWOIS Item #3184 was completely and thoroughly investigated by launch drag, pipe drag, and fathometer search during this survey operation. The ^{clearance} ~~least~~ depths and detached positions are accurate and considered adequate for charting.

N. Incomplete Items

There are no incomplete items contained in this survey.

O. Currents and Winds

Tidal currents were closely monitored during the course of this survey, since launch drag operations were planned to run with the surface current. Comparisons were made with the Tidal Current Tables 1984, Atlantic Coast of North America for station 4746, 5.8 miles east of Wolf Trap Light.

In general, the times and strengths of maximum current and times of slack water agreed with the predicted times and strengths under normal conditions. However, this entire area is greatly influenced by North, Northwesterly and Southeasterly winds, which considerably prolong or reduce the tidal currents, depending on wind direction and duration.

P. Personnel

The officers participating in this survey were LCDR Donald D. Winter, LT Neal G. Millett, LT Edward M. Clark, ENS Jason H. Maddox and ENS Thomas G. Callahan.

Q. General Notes

The format of this report is a composite of the Descriptive Report formats contained in the Wire Dras and Hydrographic Manuals. This format is the optimum composite of the pertinent sections of the two reports and is more applicable to the surveys currently being conducted by the RUDE and HECK.

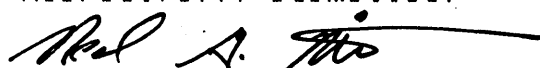
Loran C rates were not determined for this item since neither survey launch was equipped with Loran C equipment.

Del Norte interference was experienced on several occasions within the Project area as a result of other users of this equipment being on the air. The Norfolk Dressing Company is one user of Del Norte 520 equipment in the Norfolk Harbor area. Contact with this company at (804) 547-9391 may prove to be useful in this regard.

Non-priority items were completed during the 1984 field season because of their proximity to priority items, existing position control, and to reduce transit time to and from anchorage areas.

Progress on this survey was greatly hindered by the numerous crab pots set in the bay during the period April 1 through May 20. It is not recommended that future projects be scheduled in Chesapeake Bay during crab season and during the above period. CONCUR

Respectfully submitted,



Neal G. Millett, LT., NOAA

R. APPROVAL SHEET

FE-259 WD

R/H 10-3-84

Field operations contributing to the accomplishment of this survey were conducted under my supervision with frequent personal checks of progress and adequacy. This report and ^{the} field sheets have been closely reviewed and are considered complete and adequate for charting.



Donald D. Winter

LCDR., NOAA

Commanding Officer

NOAA Ships RUDE & HECK

C. HORIZONTAL CONTROL

No new stations were established for this survey. See Appendix D, Signal List, for a complete listing of all stations used during this survey.

D. SIGNAL LIST

PROJECT:

OPR-E609-RWHE-84
CHESAPEAKE BAY

SIGNALS/STATIONS

✓ YORK SPIT LIGHTHOUSE
(1900)

ID NBR 1
LAT 371234.452
LON 761516.369
ELEV N 11.28 M
FILE 1

✓ WOLF TRAP LIGHTHOUSE
(1898)

ID NBR 2
LAT 372324.618
LON 761123.295
ELEV N 15.85 M
FILE 2

~~THIMBLE SHOAL
LIGHTHOUSE (1909)~~

~~ID NBR 3
LAT 370051.712
LON 761425.075
ELEV N 16.76 M
FILE 3~~

✓ CHERRYSTONE BAR
LIGHT (1954)

ID NBR 4
LAT 371522.825
LON 760158.208
FILE 4

CAPE CHARLES CITY RANGE
FRONT LIGHT (1954)

ID NBR 5
LAT 371445.887
LON 760128.843
FILE 5

CAPE CHARLES WATER
TANK CHAR (1914)

ID NBR 6
LAT 371604.409
LON 760039.408
FILE 6

CHERITON, WEBSTER
CANNING CO. TANK (1939)

ID NBR 7
LAT 371732.709
LON 755734.786
FILE 7

CAPE CHARLES 771 ST
AN/APS NORTH TOWER DOME
(1962)

ID NBR 8
LAT 370803.977
LON 755704.193
FILE 8

CAPE CHARLES 771 ST
AN/APS SOUTH TOWER DOME
(1962)

ID NBR 9
LAT 370802.246
LON 755704.202
FILE 9

✓ CAPE CHARLES 771 ST
AN/APS TOWER (1959)

ID NBR 10
LAT 370757.097
LON 755714.854
FILE 10

~~FISHERMAN ISLAND
NAVY TOWER (1959)~~

~~ID NBR 11
LAT 370557.890
LON 755845.131
FILE 11~~

~~FISHERMAN ISLAND
NAVY SHORAN TOWER (1959)~~

~~ID NBR 12
LAT 370551.122
LON 755845.459
FILE 12~~

~~FISHERMAN ISLAND
NAVY WATER TANK (1959)~~

~~ID NBR 13
LAT 370604.124
LON 755843.436
FILE 13~~

~~CAPE CHARLES NEW
LIGHTHOUSE (1887)~~

~~ID NBR 14
LAT 370722.008
LON 755424.577
FILE 14~~

✓ NEW PT COMFORT
LIGHTHOUSE (1871)

ID NBR 15
LAT 371803.167
LON 761641.171

FILE 15

OCEANVIEW MUNICIPAL
WATER TANK (1950)

ID NBR 16
LAT 365651.633
LON 761533.886

FILE 16

MOORE (1943)

ID NBR 17
LAT 365658.489
LON 761511.421

FILE 17

FORT MONROE TANK
(1928)

ID NBR 18
LAT 370024.444
LON 761841.996

FILE 18

CHAMBERLAIN VANDERBILT
HOTEL WEST TOWER (1912)

ID NBR 19
LAT 370003.284
LON 761846.377

FILE 19

OLD POINT COMFORT
ROUND BRICK CHIMNEY (1919)

ID NBR 20
LAT 370006.375
LON 761844.521

FILE 20

LITTLE CREEK NAB DESERT
CAVE TANK (1955)

ID NBR 21
LAT 365514.382
LON 760942.063

FILE 21

HAMPTON RADIO STATION
WVEC MAST (1953)

ID NBR 22
LAT 370217.816
LON 761829.183

FILE 22

✓ TOW (1947)

ID NBR 23
LAT 370712.122
LON 761759.260

FILE 23

✓ FOX HILL MUNICIPAL
WATER TANK (1939)

ID NBR 24
LAT 370454.897
LON 761715.253

FILE 24

✓ CHEAPSIDE USE (1939)

ID NBR 25
LAT 371119.428
LON 755954.063

FILE 25

✓ OLD PLANTATION FLATS
LIGHT (1981)

ID NBR 26
LAT 371343.138
LON 760250.256

FILE 26

F. DIVING REPORT

NEGATIVE REPORT

H. LOCAL NOTICE TO MARINERS REPORT



**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

NOAA SHIPS RUDE & HECK
439 W. York St.
Norfolk, VA 23510

May 29, 1984

TO: Commander, Fifth Coast Guard District
Federal Building
431 Crawford St.
Portsmouth, VA 23705

FROM: *Donald D. Winter*
LCDR Donald D. Winter
Commanding Officer

SUBJ: Notice to Mariners

Survey operations by the NOAA Ships RUDE and HECK, east of Wolf Trap Degaussing Lighted Bell Buoy, "WT2", have located the ruins of the former degaussing range within the following foul area limits:

NW Corner	37° 24' 14.21"N, 076° 03' 40.52"W
NE Corner	37° 24' 14.28"N, 076° 03' 38.69"W
SW Corner	37° 24' 10.34"N, -076° 03' 40.31"W
SE Corner	37° 24' 10.10"N, 076° 03' 38.63"W

The least depth within this foul area is located at 37° 24' 13.65"N, 076° 03' 38.99"W, with a wire drag cleared depth of 3.5 feet at MLLW, corrected for predicted tides. This item is presently charted as "Subm obstr (3 ft rep 1980)".

Reference: AWOIS Item 3184, Chart 12226



J. DANGERS TO NAVIGATION REPORT

See Local Notice to Mariners

DATE: 7/6/84

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Atlantic

OPR: E609

Hydrographic Sheet: RU/HE 10/3/84, FE-259 WD

Locality: Chesapeake Bay

Time Period: April 26 - May 22, 1984

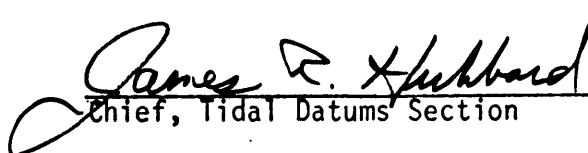
Tide Station Used: 863-8610 Hampton Roads, VA

Plane of Reference (Mean Lower Low Water): 4.01 ft.

Height of Mean High Water Above Plane of Reference: 2.6 ft.

Remarks: Recommended Zoning:

For Awois item #3184 apply +10 minute time correction and x0.81 range ratio


Chief, Tidal Datums Section

GEOGRAPHIC NAMES

FE-259 WD

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND McNALLY ATLAS	H U.S. LIGHT LIST	K
CHESAPEAKE BAY (title)									1
VIRGINIA (title)									2
WOLF TRAP (title)									3
									4
									5
									6
									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25

Approved:

Charles E. Harrison
Chief Geographer N/C 2x5

JUL 30 1984

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: FE-259 WD

Number of positions	<u>36</u>
Number of soundings	<u>0</u>
Number of control stations	<u>9</u>

	<u>TIME-HOURS</u>	<u>DATE COMPLETED</u>
Preprocessing Examination	<u>3</u>	<u>8/17/84</u>
Verification of Field Data	<u>6</u>	<u>8/24/84</u>
Quality Control Checks	<u>2</u>	
Evaluation and Analysis	<u>11</u>	<u>8/24/84</u>
Final Inspection	<u>2</u>	<u>8/24/84</u>
TOTAL TIME	<u>24</u>	
Marine Center Approval		<u>8/24/84</u>

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: FE-259 WD

FIELD NO.: R/H-10-03-84

Virginia, Chesapeake Bay, 6 Miles East of Wolf Trap

SURVEYED: 26 April and 22 May 1984

SCALE: 1:10,000

PROJECT NO.: OPR-E609-RU/HE-84

SOUNDINGS: Constant Tension Wire Drag CONTROL: Del Norte (Range/
Range)

Chief of Party.....D. D. Winter

Surveyed by.....N. G. Millett
.....E. M. Clark
.....J. H. Maddox
.....T. G. Callahan

Smooth Sheet by.....C. D. Meador

1. PURPOSE OF THE SURVEY

The purpose of this wire-drag field examination was to investigate a Submerged Obstruction (3 FT REP 1980) charted in Latitude 37°24'12", Longitude 76°03'42", from Local Notice to Mariners 42/80.

The result of this investigation is shown on the accompanying mylar overlay inserted in the Descriptive Report.

A position overlay was not prepared because the constant tension wire-drag strips plot directly over each other. Preparation of a position overlay in this case would have been more confusing than enlightening. The computer-generated position overlays used during office processing are in an envelope filed with the original field data.

A hang at an effective depth of 5 feet within an area defined by the field as foul with submerged debris was not plotted on the A&D Sheet. Since this hang was subsequently cleared by 3 feet, it was decided during office processing that it was more critical to show the outlined extent of the foul area rather than the hang location within the foul area on the A&D Sheet.

2. CONTROL AND SHORELINE

a. The control is adequately discussed in sections F and G of the Descriptive Report.

b. There is no shoreline within the area of this wire-drag field examination.

3. JUNCTIONS

This is an item investigation with no junctional requirements.

4. COMPARISON WITH HYDROGRAPHIC SURVEY

H-8448 (1958) 1:20,000

With the additional annotations in red made during office processing, the discussion in section K of the Descriptive Report for the present wire-drag field examination is adequate.

5. COMPARISON WITH CHART 12226 (10th Edition, March 27, 1982)

a. Hydrography

With the additional annotations in red made during office processing, the discussion in section L of the Descriptive Report for the present wire-drag field examination is adequate.

b. Aids to Navigation

The discussion in section L of the Descriptive Report for the present wire-drag field examination is adequate.

6. CONDITION OF SURVEY

The condition of the survey is satisfactory except as follows:

a. Field Work and Records

1) Wolf Trap Degaussing Lighted Bell Buoy "WT2" was not hung as required by section 7.11.4 of the Project Instructions. However, this requirement is not considered practical for an item investigation. This requirement is only considered appropriate when the item being investigated has not been located by a regular wire-drag investigation or when a wire-drag investigation is needed to assure an area clearance within which specific investigation items are not identified. Project Instructions in the future should be written to reflect the needs of these specific types of surveys.

2) When fathograms are submitted with the field work, the draft of the vessel's transducer should be documented in the Descriptive Report. The fathogram for the fathometer and pipe drag searches done on JD 117 states, "Launch draft recorded in volume." No value for the draft was found in the NOAA Form 77-44 SOUNDINGS or the USGS Forms 411 WIRE DRAG submitted with the field data.

b. Descriptive Report

The Descriptive Report for this survey was well written.

c. Field Plotting

The field plotting of the survey data was satisfactory.

7. COMPLIANCE WITH PROJECT INSTRUCTIONS

Except as noted in section 6 of this Evaluation Report, this field examination adequately complies with the Project Instructions.

8. ADDITIONAL FIELD WORK

This is an excellent wire-drag field examination and no additional field work is recommended.

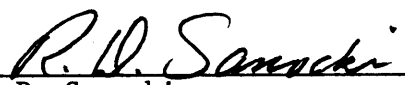
Charles D. Meador

Charles D. Meador
Chief, Evaluation and Analysis Group
Evaluation and Analysis

Inspection Report
FE - 259 WD

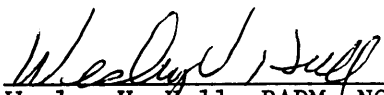
The completed survey has been inspected with regard to survey coverage, investigation of hangs and clearance depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected



R. D. Sanocki
Chief, Hydrographic Surveys
Processing Section
Hydrographic Surveys Branch

Approved August 24, 1984



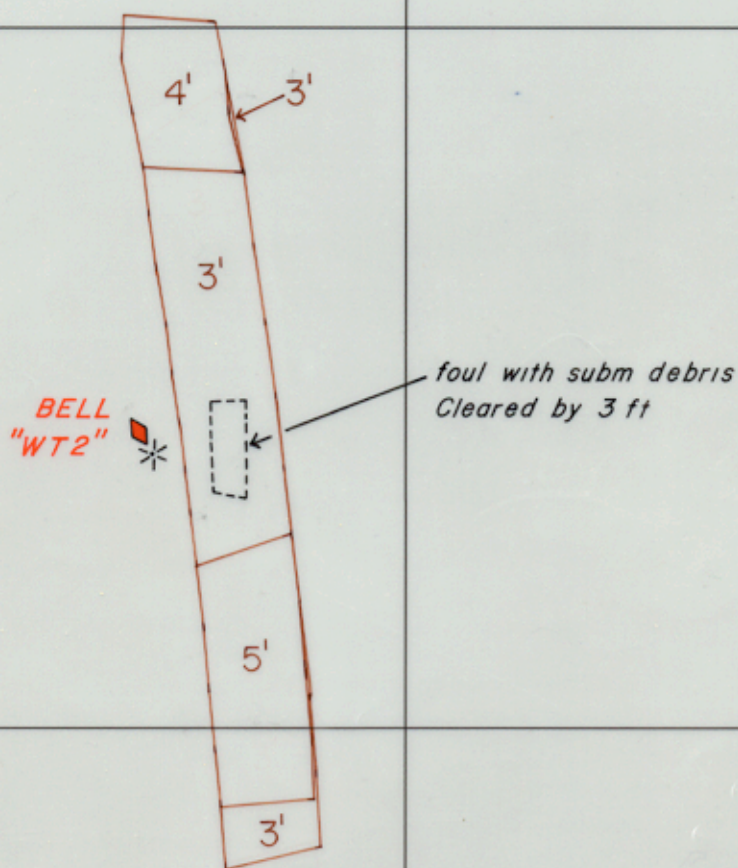
Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

76° 04' 00"

76° 03' 30"

76° 03' 00"

37° 24' 30"



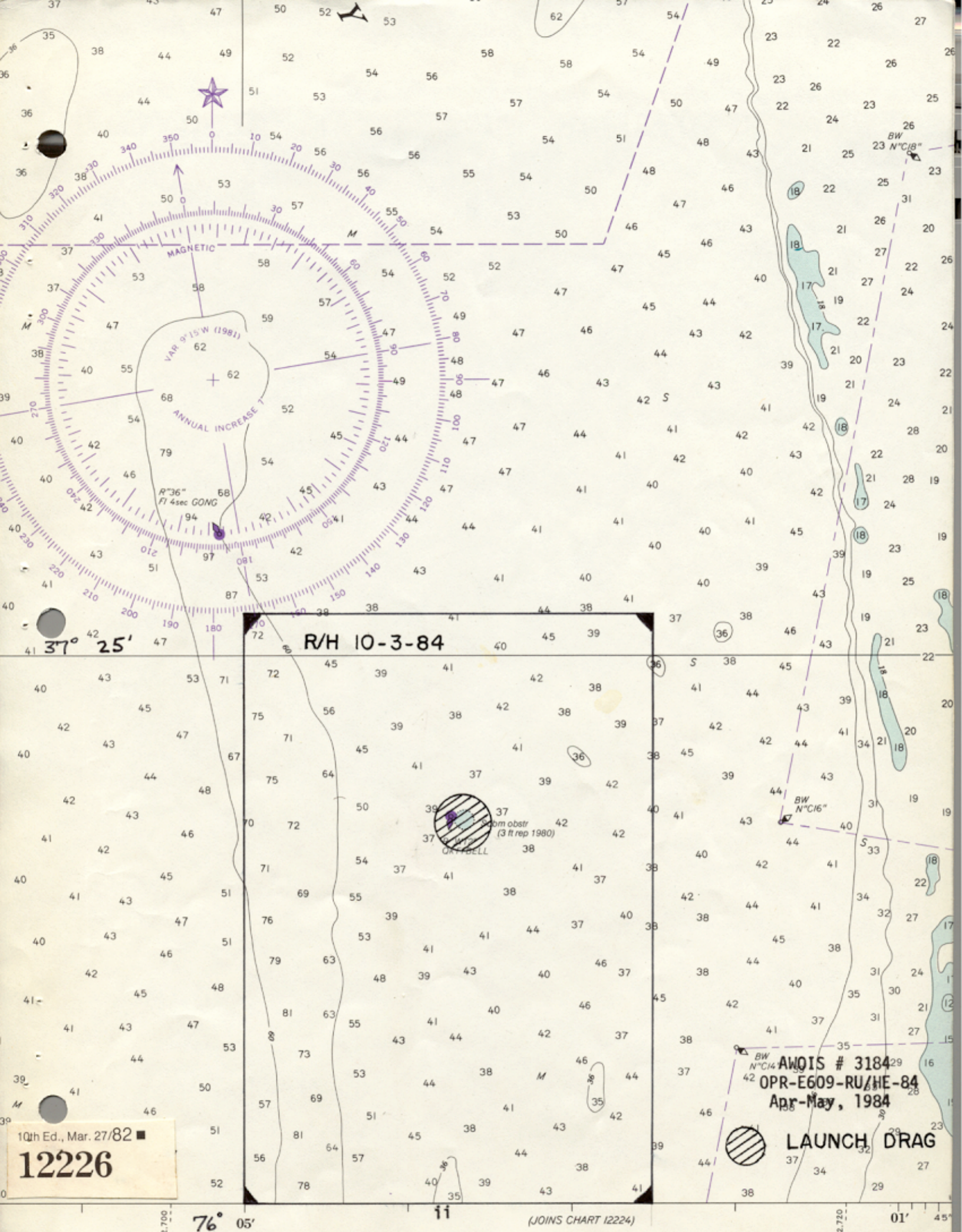
37° 24' 00"

FE - 259 WD (1984) AWOIS ITEM NO. 3184
SCALE 1:10,000
POLYCONIC PROJECTION
NORTH AMERICAN DATUM OF 1927
MLLW DATUM
A & D SHEET

76° 04' 00"

76° 03' 30"

76° 03' 00"



10th Ed., Mar. 27/82 ■
12226

R/H 10-3-84

AWOIS # 3184
OPR-E609-RU/HE-84
Apr-May, 1984
LAUNCH DRAG

